

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

**What is claimed is:**

1-48. (Cancelled)

49. (Previously Presented) A peptide consisting of the formula V,  $RX_6X_7X_8X_9$  (SEQ ID No. 293),

wherein

$X_6$  is arginine, serine or lysine;

$X_7$  is leucine, isoleucine or valine;

$X_8$  is asparagine, alanine, glycine or isoleucine; and

$X_9$  is a natural or unnatural amino acid selected from the group consisting of leucine, cyclohexylalanine (Cha), homophenylalanine (Hof), tyrosine, parafluorophenylalanine (pFPhe), metafluorophenylalanine (mFPhe), tryptophan, 1-naphthylalanine (1Nal), 2-naphthylalanine (2Nal), metachlorophenylalanine (mClPhe), biphenylalanine (Bip) and 1,2,3,4-tetrahydroisoquinoline-3-carboxylic acid (Tic).

50. (Currently Amended) A peptide consisting of formula V,

$RX_6X_7X_8X_9$  (SEQ ID No. 293),

wherein:

$X_6$  is arginine, serine or lysine;

$X_7$  is leucine, isoleucine or valine;

$X_8$  is asparagine, alanine, glycine or isoleucine; and

$X_9$  is a natural or unnatural amino acid selected from the group consisting of leucine, cyclohexylalanine (Cha), homophenylalanine (Hof), tyrosine, parafluorophenylalanine (pFPhe), metafluorophenylalanine (mFPhe), tryptophan, 1-naphthylalanine (1Nal), 2-naphthylalanine (2Nal), metachlorophenylalanine (mClPhe), biphenylalanine (Bip) and 1,2,3,4-tetrahydroisoquinoline-3-carboxylic acid (Tic);

or a variant thereof wherein:

- (a) R is unchanged or conservatively substituted by a basic amino acid; and/or
- (b) X<sub>6</sub> is substituted by arginine, serine or lysine or any amino acid capable of providing at least one site for participating in hydrogen bonding; and/or
- (c) X<sub>7</sub> is unchanged-leucine, isoleucine or valine or conservatively substituted;
- (d) X<sub>8</sub> is asparagine, alanine, glycine or isoleucine or conservatively substituted; and
- (e) X<sub>9</sub> is a natural or unnatural amino acid selected from the group consisting of leucine, cyclohexylalanine (Cha), homophenylalanine (Hof), tyrosine, parafluorophenylalanine (pFPhe), metafluorophenylalanine (mFPhe), tryptophan, 1-naphthylalanine (1Nal), 2-naphthylalanine (2Nal), metachlorophenylalanine (mClPhe), biphenylalanine (Bip) and 1,2,3,4-tetrahydroisoquinoline-3-carboxylic acid (Tic).

51. **(Withdrawn - Currently Amended)** A peptide consisting of the formula V,  
RX<sub>6</sub>X<sub>7</sub>X<sub>8</sub>X<sub>9</sub> (SEQ ID No. 293),

wherein:

- X<sub>6</sub> is arginine, serine or lysine;
- X<sub>7</sub> is leucine, isoleucine or valine;
- X<sub>8</sub> is asparagine, alanine, glycine or isoleucine; and
- X<sub>9</sub> is a natural or unnatural amino acid selected from the group consisting of leucine, cyclohexylalanine (Cha), homophenylalanine (Hof), tyrosine, parafluorophenylalanine (pFPhe), metafluorophenylalanine (mFPhe), tryptophan, 1-naphthylalanine (1Nal), 2-naphthylalanine (2Nal), metachlorophenylalanine (mClPhe), biphenylalanine (Bip) and 1,2,3,4-tetrahydroisoquinoline-3-carboxylic acid (Tic);  
or a variant thereof, wherein:

- (a) R is replaced by either a basic amino acid residue or an uncharged natural or unnatural amino acid residue; and/or
- (b) X<sub>6</sub> is ~~arginine, serine or lysine~~ or is replaced by a natural or unnatural amino acid residue, or an amino acid residue capable of forming a cyclic linkage; and/or
- (c) X<sub>7</sub> is ~~leucine, isoleucine or valine~~ or is replaced with a natural or unnatural amino acid residue having a slightly larger aromatic or aliphatic side chain; and/or
- (d) X<sub>8</sub> is ~~asparagine, alanine, glycine or isoleucine~~ or is replaced with a natural or unnatural amino acid residue having a slightly larger aromatic or aliphatic side chain; ~~and~~

~~—— (e)  $X_9$  is a natural or unnatural amino acid selected from the group consisting of leucine, cyclohexylalanine (Cha), homophenylalanine (Hof), tyrosine, parafluorophenylalanine (pFPhe), metafluorophenylalanine (mFPhe), tryptophan, 1-naphthylalanine (1Nal), 2-naphthylalanine (2Nal), metachlorophenylalanine (mClPhe), biphenylalanine (Bip) and 1,2,3,4-tetrahydroisoquinoline 3-carboxylic acid (Tic).~~

52. **(Withdrawn)** The peptide of claim 50, wherein R is conservatively substituted by a basic amino acid.

53. **(Withdrawn)** The peptide of claim 50, wherein  $X_6$  is substituted by any amino acid capable of providing at least one site for participating in hydrogen bonding.

54. **(Withdrawn)** The peptide of claim 50, wherein  $X_7$  is conservatively substituted.

55. **(Cancelled)**

56. **(Cancelled)**

57. **(Withdrawn)** The peptide of claim 51, wherein R is replaced by a basic residue.

58. **(Withdrawn)** The peptide of claim 57, wherein the basic amino acid residue is lysine.

59. **(Withdrawn)** The peptide of claim 51, wherein R is replaced by an uncharged natural or unnatural amino acid residue selected from the group consisting of citrulline (Cit), homoserine, histidine, norleucine (Nle) and glutamine.

60. **(Withdrawn)** The peptide of claim 51, wherein  $X_6$  is replaced by a natural or unnatural amino acid residue, or an amino acid residue capable of forming a cyclic linkage.

61. **(Withdrawn)** The peptide of claim 60, wherein the natural or unnatural amino acid residue is selected from the group consisting of asparagine, proline, aminoisobutyric acid (Aib) and sarcosine (Sar).

62. **(Withdrawn)** The peptide of claim 60, wherein the amino acid residue capable of forming a cyclic linkage is ornithine.
63. **(Withdrawn)** The peptide of claim 51, wherein X<sub>7</sub> is replaced with a natural or unnatural amino acid residue having a slightly larger aromatic or aliphatic side chain.
64. **(Withdrawn)** The peptide of claim 63, wherein the natural or unnatural amino acid residue having a slightly larger aromatic or aliphatic side chain is selected from the group consisting of norleucine, norvaline, cyclohexylalanine (Cha), phenylalanine and 1-naphthylalanine (1Nal).
65. **(Withdrawn)** The peptide of claim 51, wherein X<sub>8</sub> is replaced with a natural or unnatural amino acid residue having a slightly larger aromatic or aliphatic side chain.
66. **(Withdrawn)** The peptide of claim 65, wherein the natural or unnatural amino acid residue having a slightly larger aromatic or aliphatic side chain is selected from the group consisting of norleucine, norvaline, cyclohexylalanine (Cha), phenylalanine and 1-naphthylalanine (1Nal).
- 67-68. **(Cancelled)**
69. **(Previously Presented)** The peptide as in any of claims 49-51, wherein the N-terminal is acylated.
70. **(Withdrawn)** The peptide of claim 50 or 51, wherein R is substituted by citrulline.
71. **(Currently Amended)** A peptide selected from the group consisting of:
- |    |     |     |     |     |                   |                 |                  |
|----|-----|-----|-----|-----|-------------------|-----------------|------------------|
| H- | Arg | Arg | Leu | Asn | <u>PFFpFPhe</u>   | NH <sub>2</sub> | (SEQ ID No. 295) |
| H- | Arg | Arg | Leu | Asn | <u>MCIFmCIPhe</u> | NH <sub>2</sub> | (SEQ ID No. 296) |
| H- | Arg | Arg | Leu | Ala | <u>PFFpFPhe</u>   | NH <sub>2</sub> | (SEQ ID No. 298) |
| H- | Arg | Arg | Leu | Ala | <u>MCIFmCIPhe</u> | NH <sub>2</sub> | (SEQ ID No. 299) |

H-	Arg	Arg	Leu	Gly	<u>PFFpFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 301)
H-	Arg	Arg	Leu	Gly	<u>MCIFmCIPhe</u>	NH <sub>2</sub>	(SEQ ID No. 302)
H-	Arg	Arg	Ile	Asn	<u>PFFpFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 304)
H-	Arg	Arg	Ile	Asn	<u>MCIFmCIPhe</u>	NH <sub>2</sub>	(SEQ ID No. 305)
H-	Arg	Arg	Ile	Ala	<u>PFFpFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 307)
H-	Arg	Arg	Ile	Ala	<u>MCIFmCIPhe</u>	NH <sub>2</sub>	(SEQ ID No. 308)
H-	Arg	Arg	Ile	Gly	<u>PFFpFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 310)
H-	Arg	Arg	Ile	Gly	<u>MCIFmCIPhe</u>	NH <sub>2</sub>	(SEQ ID No. 311)
H-	Arg	Arg	Val	Asn	<u>PFFpFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 313)
H-	Arg	Arg	Val	Asn	<u>MCIFmCIPhe</u>	NH <sub>2</sub>	(SEQ ID No. 314)
H-	Arg	Arg	Val	Ala	<u>PFFpFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 316)
H-	Arg	Arg	Val	Ala	<u>MCIFmCIPhe</u>	NH <sub>2</sub>	(SEQ ID No. 317)
H-	Arg	Arg	Val	Gly	<u>PFFpFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 319)
H-	Arg	Arg	Val	Gly	<u>MCIFmCIPhe</u>	NH <sub>2</sub>	(SEQ ID No. 320)
H-	Arg	Ser	Leu	Asn	<u>PFFpFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 322)
H-	Arg	Ser	Leu	Asn	<u>MCIFmCIPhe</u>	NH <sub>2</sub>	(SEQ ID No. 323)
H-	Arg	Ser	Leu	Ala	<u>PFFpFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 325)
H-	Arg	Ser	Leu	Ala	<u>MCIFmCIPhe</u>	NH <sub>2</sub>	(SEQ ID No. 326)
H-	Arg	Ser	Leu	Gly	<u>PFFpFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 328)
H-	Arg	Ser	Leu	Gly	<u>MCIFmCIPhe</u>	NH <sub>2</sub>	(SEQ ID No. 329)
H-	Arg	Ser	Ile	Asn	<u>PFFpFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 331)
H-	Arg	Ser	Ile	Asn	<u>MCIFmCIPhe</u>	NH <sub>2</sub>	(SEQ ID No. 332)
H-	Arg	Ser	Ile	Ala	<u>PFFpFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 334)
H-	Arg	Ser	Ile	Ala	<u>MCIFmCIPhe</u>	NH <sub>2</sub>	(SEQ ID No. 335)
H-	Arg	Ser	Ile	Gly	<u>PFFpFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 337)
H-	Arg	Ser	Ile	Gly	<u>MCIFmCIPhe</u>	NH <sub>2</sub>	(SEQ ID No. 338)
H-	Arg	Ser	Val	Asn	<u>PFFpFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 340)
H-	Arg	Ser	Val	Asn	<u>MCIFmCIPhe</u>	NH <sub>2</sub>	(SEQ ID No. 341)
H-	Arg	Ser	Val	Ala	<u>PFFpFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 343)
H-	Arg	Ser	Val	Ala	<u>MCIFmCIPhe</u>	NH <sub>2</sub>	(SEQ ID No. 344)
H-	Arg	Ser	Val	Gly	<u>PFFpFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 346)
H-	Arg	Ser	Val	Gly	<u>MCIFmCIPhe</u>	NH <sub>2</sub>	(SEQ ID No. 347)
H-	Arg	Lys	Leu	Asn	<u>PFFpFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 349)
H-	Arg	Lys	Leu	Asn	<u>MCIFmCIPhe</u>	NH <sub>2</sub>	(SEQ ID No. 350)
H-	Arg	Lys	Leu	Ala	<u>PFFpFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 352)
H-	Arg	Lys	Leu	Ala	<u>MCIFmCIPhe</u>	NH <sub>2</sub>	(SEQ ID No. 353)
H-	Arg	Lys	Leu	Gly	<u>PFFpFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 355)
H-	Arg	Lys	Leu	Gly	<u>MCIFmCIPhe</u>	NH <sub>2</sub>	(SEQ ID No. 356)
H-	Arg	Lys	Ile	Asn	<u>PFFpFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 358)
H-	Arg	Lys	Ile	Asn	<u>MCIFmCIPhe</u>	NH <sub>2</sub>	(SEQ ID No. 359)
H-	Arg	Lys	Ile	Ala	<u>PFFpFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 361)
H-	Arg	Lys	Ile	Ala	<u>MCIFmCIPhe</u>	NH <sub>2</sub>	(SEQ ID No. 362)
H-	Arg	Lys	Ile	Gly	<u>PFFpFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 364)
H-	Arg	Lys	Ile	Gly	<u>MCIFmCIPhe</u>	NH <sub>2</sub>	(SEQ ID No. 365)

H-	Arg	Lys	Val	Asn	<u>PFFpFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 367)
H-	Arg	Lys	Val	Asn	<u>MCIFmClPhe</u>	NH <sub>2</sub>	(SEQ ID No. 368)
H-	Arg	Lys	Val	Ala	<u>PFFpFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 370)
H-	Arg	Lys	Val	Ala	<u>MCIFmClPhe</u>	NH <sub>2</sub>	(SEQ ID No. 371)
H-	Arg	Lys	Val	Gly	<u>PFFpFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 373)
H-	Arg	Lys	Val	Gly	<u>MCIFmClPhe</u>	NH <sub>2</sub>	(SEQ ID No. 374)
H-	Arg	Arg	Leu	Ile	<u>PFFpFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 375) <u>and</u>
H-	Cit	Cit	Leu	Ile	<u>PFFpFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 376).

72. **(Currently Amended)** The peptide of claim 71, wherein the peptide is selected from the group consisting of:

H-	Arg	Arg	Leu	Asn	<u>PFFpFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 295)
H-	Arg	Arg	Leu	Asn	<u>MCIFmClPhe</u>	NH <sub>2</sub>	(SEQ ID No. 296)
H-	Arg	Arg	Leu	Ala	<u>PFFpFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 298)
H-	Arg	Arg	Leu	Ala	<u>MCIFmClPhe</u>	NH <sub>2</sub>	(SEQ ID No. 299)
H-	Arg	Arg	Leu	Gly	<u>PFFpFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 301)
H-	Arg	Arg	Leu	Gly	<u>MCIFmClPhe</u>	NH <sub>2</sub>	(SEQ ID No. 302)
H-	Arg	Arg	Ile	Asn	<u>PFFpFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 304)
H-	Arg	Arg	Ile	Asn	<u>MCIFmClPhe</u>	NH <sub>2</sub>	(SEQ ID No. 305)
H-	Arg	Arg	Ile	Ala	<u>PFFpFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 307)
H-	Arg	Arg	Ile	Ala	<u>MCIFmClPhe</u>	NH <sub>2</sub>	(SEQ ID No. 308)
H-	Arg	Lys	Leu	Asn	<u>MCIFmClPhe</u>	NH <sub>2</sub>	(SEQ ID No. 350)
H-	Arg	Lys	Leu	Ala	<u>PFFpFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 352)
H-	Arg	Lys	Leu	Ala	<u>MCIFmClPhe</u>	NH <sub>2</sub>	(SEQ ID No. 353)
H-	Arg	Lys	Leu	Gly	<u>PFFpFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 355)
H-	Arg	Lys	Ile	Asn	<u>PFFpFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 358) <u>and</u>
H-	Arg	Arg	Leu	Ile	<u>PFFpFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 375).

73. **(Currently Amended)** The peptide of claim 71, wherein the peptide is selected from the group consisting of:

H-	Arg	Arg	Leu	Asn	<u>PFFpFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 295)
H-	Arg	Arg	Leu	Asn	<u>MCIFmClPhe</u>	NH <sub>2</sub>	(SEQ ID No. 296)
H-	Arg	Arg	Leu	Ala	<u>PFFpFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 298)
H-	Arg	Arg	Leu	Ala	<u>MCIFmClPhe</u>	NH <sub>2</sub>	(SEQ ID No. 299)
H-	Arg	Arg	Leu	Gly	<u>PFFpFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 301)
H-	Arg	Arg	Leu	Gly	<u>MCIFmClPhe</u>	NH <sub>2</sub>	(SEQ ID No. 302)
H-	Arg	Arg	Ile	Asn	<u>PFFpFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 304)
H-	Arg	Arg	Ile	Asn	<u>MCIFmClPhe</u>	NH <sub>2</sub>	(SEQ ID No. 305)

H-	Arg	Arg	Ile	Ala	<del>PFF</del> <u>pFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 307)
H-	Arg	Arg	Ile	Ala	<del>MCI</del> <u>FmClPhe</u>	NH <sub>2</sub>	(SEQ ID No. 308)
H-	Arg	Lys	Leu	Asn	<del>MCI</del> <u>FmClPhe</u>	NH <sub>2</sub>	(SEQ ID No. 350)
H-	Arg	Lys	Leu	Ala	<del>PFF</del> <u>pFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 352)
H-	Arg	Lys	Leu	Ala	<del>MCI</del> <u>FmClPhe</u>	NH <sub>2</sub>	(SEQ ID No. 353)
H-	Arg	Lys	Leu	Gly	<del>PFF</del> <u>pFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 355)
H-	Arg	Lys	Ile	Asn	<del>PFF</del> <u>pFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 358) <u>and</u>
H-	Arg	Arg	Leu	Ile	<del>PFF</del> <u>pFPhe</u>	NH <sub>2</sub>	(SEQ ID No. 375) <u>.</u>